

D R A F T
Meeting Summary
Delaware Geographic Data Committee
9:300 a.m., August 29, 2001
Biden Center, Lewes

Attendance List:*

Lewis Huffman – Dept. of Education
Bernie Yacobucci – WILMAPCO
Janine Gottlieb – ESRI
Dick Sacher – UD/RDMS
Michael Ward – Kent County
McKelvin Gilbert – DelDOT
Peter Owusu-Donkor – Kent County MPO
Rick Steffers – City of Wilmington
Seth Van Aiken – ESRI
John Callahan – UD/RDMS
Connie Holland – State Planning Coordination
George Yocher – DPH
Maria Trabka – TNC
Miriam Pomilio – DNREC
Dennis Murphy – DNREC
Lillian Wang – DGS
Debbie Pfeil – Town of Georgetown
Matt Zimolzak – US Census Bureau

Negede Gedamu – UD
Tim Lucas – Del. Coastal Programs
Rico Santiago – Del. Coastal Programs
Lyn Anderson – Dept. of Labor
David Beattie – City of Wilmington
William Fischer – DNREC
Mary C. Harper – Dept. of State
Anne Jeffers – US Census Bureau
Mike Mahaffie – State Planning Coordination
Dorothy Morris – State Planning Coordination
Shelly McCoy – UD
Nicole Minni – UD
Richard Rutter – DEDO
Paul Sample – Legislative Council
Sandy Schenck – DGS
Vern Svatos – UD
Doyle Tiller – Admin Services

Welcome and Introductions

Mike Mahaffie began the meeting by going over the agenda and asking each person present to introduce themselves to the group.

Information Updates

I-Team

Mike stated that the I-Team is a high-level group that focuses on framework. Mike went over the I-Team Executive Order and the membership of the I-Team. The first meeting of the I-Team will be September 20, 2001 at 3:00 p.m. in the Tatnall building in Dover. Mike stated that if anyone had anything they felt should go to the I-Team, it should be brought to the attention of the DGDC. The main focus of the I-Team will be framework.

Connie Holland stated that the first meeting of the I-Team will be to work on their mission and determine what needs to be accomplished and how to move forward.

* This list is based on the sign-in sheet filled in at the meeting. As always, we may have misread a name or someone may have missed the sign-in sheet. If you have any additions or deletions to suggest, please e-mail Mike Mahaffie at mmahaffie@state.de.us.

2002 Delaware GIS Conference

Mike stated that the conference would be one of the days between April 12 and April 19. The Conference Committee has not chosen the date because they were waiting on some information from possible conference sites. Mike stated that they are looking into the Rehoboth Beach Country Club and that more information would follow.

DelDOT Geocoder

As Vince is not at the meeting, Mike will ask that he send an e-mail out via the listserv to let everyone know what is happening with this project.

Mailing List Sharing

Mike stated that he has had requests from vendors to share the DGDC mailing list but he did not want to do this without checking with everyone first. It was voted by the members present that the mailing list **not** be shared with vendors.

User Groups

Mike asked about any interest in ad hoc user groups. This was encouraged by the members present. Mike stated that he would act as a resource to set up the groups. It was discussed that, instead of breaking down into groups, the listserv be used to start virtual discussions.

Mike asked if there were any other informational updates. Bernie from WILMAPCO stated that they are looking for a Senior Planner with GIS experience. Doyle Tiller stated that Administrative Services was looking for an Engineer with GIS experience. Connie Holland stated that the Office of State Planning Coordination might have several new positions for planners with GIS capabilities.

Delaware DataMIL Project

John Callahan, of the University of Delaware Research Data Management Service, gave an overview (attached) of the Delaware Data Mapping and Integration Laboratory (DataMIL). DataMIL is a project that grew out of discussions between Delaware GIS professionals and the United State Geological Survey (USGS) about ways to use Delaware's Framework GIS data to update the USGS topographic map series, which is generally about ten years out of date in Delaware and ore out of date in other states.

The DataMIL will be an on-line laboratory for the combining of Digital Line Graph (DLG) data – the data that make up the line-work for the topographic maps series – and Delaware Framework data. The on-line laboratory will allow an on-going discussion of how to combine data sets from different sources, and at different scales. It will also allow the general public to access the most up-to-date possible maps of the state, by presenting on-line versions of “new” topographic maps of Delaware.

Delaware has entered into a Memorandum of Agreement with the USGS. Staff members from both levels have begun working on the project. John Callahan is building a web site to hold the DataMIL. USGS has provided grant funding and data collection and preparation services.

John was asked whether, when the data sets are distributed, there will a redundancy factor built in so that if one location is down it a user will be routed directly to another one. John stated that they were planning on doing that.

John was asked how many kinds of databases will DataMIL be able to link to? And will it need to be Oracle? John noted that these are good questions, but not ones that can yet be answered. He said he and his partners are working on those issues now.

Dennis Murphy stated that DataMIL is similar to a project led by EPA involving state natural resources agencies.

John was asked whether DataMIL will be tied to a commercial site or will it be free? He answered that the purpose is to freely distribute the data.

John was asked if historic data would be available? John said that the plan is to do the historical data as phase II. It was also noted that a future function of metadata will be to keep metadata for individual features, rather than whole data sets, which would allow one to track changes over time.

John was asked if the data would be in state plane coordinates. John noted that the software tools he is using allow data to be projected "on the fly" and that the coordinate system likely will not matter.

Community Atlas

Janine Gottlieb of ESRI gave a presentation (attached) on GIS Day and ESRI's Community Atlas program for schools. Janine noted that GIS Day is November 14, 2001. She discussed ESRI's commitment to making software and information available to schools and kids.

She stated that the Community Atlas is a project in which Teachers and students kids work together to create an atlas of their community. This project encourages students and teachers to think spatially, ask geographic questions, use maps and text to describe their communities and to share their results with other communities via the web.

Janine stated that the theme for the 2001 Community Atlas projects is Smart Growth and that the new site goes on line on November 14. Classes can complete this project to receive software for their school. Janine's challenge to the DGDC is to help 12 Delaware schools complete a Community Atlas by being available to answer questions and help them find information.

Schools/GPS Project

Lyn Anderson, of the DGDC Education and Training Committee, explained that the E & T group is working on a project to go into every school and work with teachers and students to collect GPS data points and attribute data. The project, dubbed "Where's my School," project matches teachers with GIS professionals to create data on the school. The E & T group is working with the Delaware Geographic alliance – a group of geography teachers – to create lesson plans to tie the project to the Delaware Curriculum.

Lyn also noted that the E & T group is working on a mentoring program whereby every school that has interest in GIS can be paired with a GIS professional.

Lynn asked that this group should use the Listserv to get help when needed.

Wrap Up

Mike announced the following meetings:

- The next DGDC meeting will be 11/16/01 in Dover.
- The next SMAC meeting will be 10/26/01 in Dover.
- The Geographic Names Committee will meet either 11/16, 11/17 or 11/18 (Sandy will send more information on this).

USGS National Map/Delaware Framework DataMIL Project

Delaware Geographic Data Committee Meeting
August 29, 2001

Presented by:
John Callahan
University of Delaware

What is DataMIL?

DataMIL = Data Mapping and
Integration Laboratory

Developed from conversations between Delaware Geological Survey, Delaware Office of State Planning and the USGS regarding the revision of topographic maps using Delaware data (September 2000).

Need for Improvement

- Delaware topographic map series (DRGs/DLGs) produced in early 1990s
- Updated Delaware DOQQs 1997/2002, Land Use, DelDOT Transportation Network, Municipal Boundaries, Watersheds (Delaware Framework)
- Several USGS National Datasets under development – GNIS, NHD, NED, Imagery, Land Cover (The National Map)

Delaware Spatial Data Framework

- Based on one of the State Land Use Goals:
“Coordinate public policy planning and decisions among state, counties and municipalities”
- The “skeleton” that holds together a wide variety of spatial data sets
- A shared Framework standard means data sets work together
- Delaware Version 1.0 complete – Nine Layers

Delaware's Framework

- Geographic Names
- Land Use
- Cadastral
- Transportation
- Hydrography
- Gov. Units
- Geodetic Control
- Hypsography
- Orthoimagery

The National Map

“...*The National Map* [is to] be the base of geographic information upon which other Federal programs will be built, and to which the spatial activities of State and local governments, the private sector, academia, and the general public can be linked.” (The National Map, <http://www.nationalmap.usgs.gov>)

The National Map

- Seamless, nationwide database
- Partnership-based
- Online distribution system (public domain)
- Most current data available

USGS is the guarantor of national data completeness, consistency, and accuracy.

The National Map

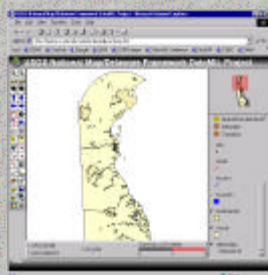
- Transportation (roads, railways)
- Hydrography (NHD)
- Orthoimagery
- Elevation (NED)
- Land Characterization
- Geographic Names (GNIS)
- Structures
- Boundaries

Primary Objectives

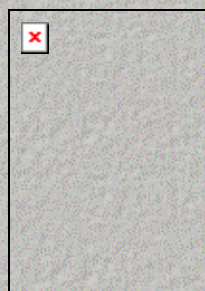
- Combine state (Delaware) and federal (USGS) geographic data to create the most up-to-date database possible
- Allow online access for the general public, state and federal agencies in the form of digital GIS data, online images, hard-copy maps, and database attribute information
- Optimize data storage and maintenance procedures

DataMIL

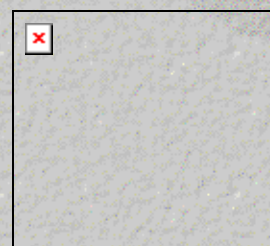
Data
Integration Lab



Map
Production Lab



Discussion
Forum

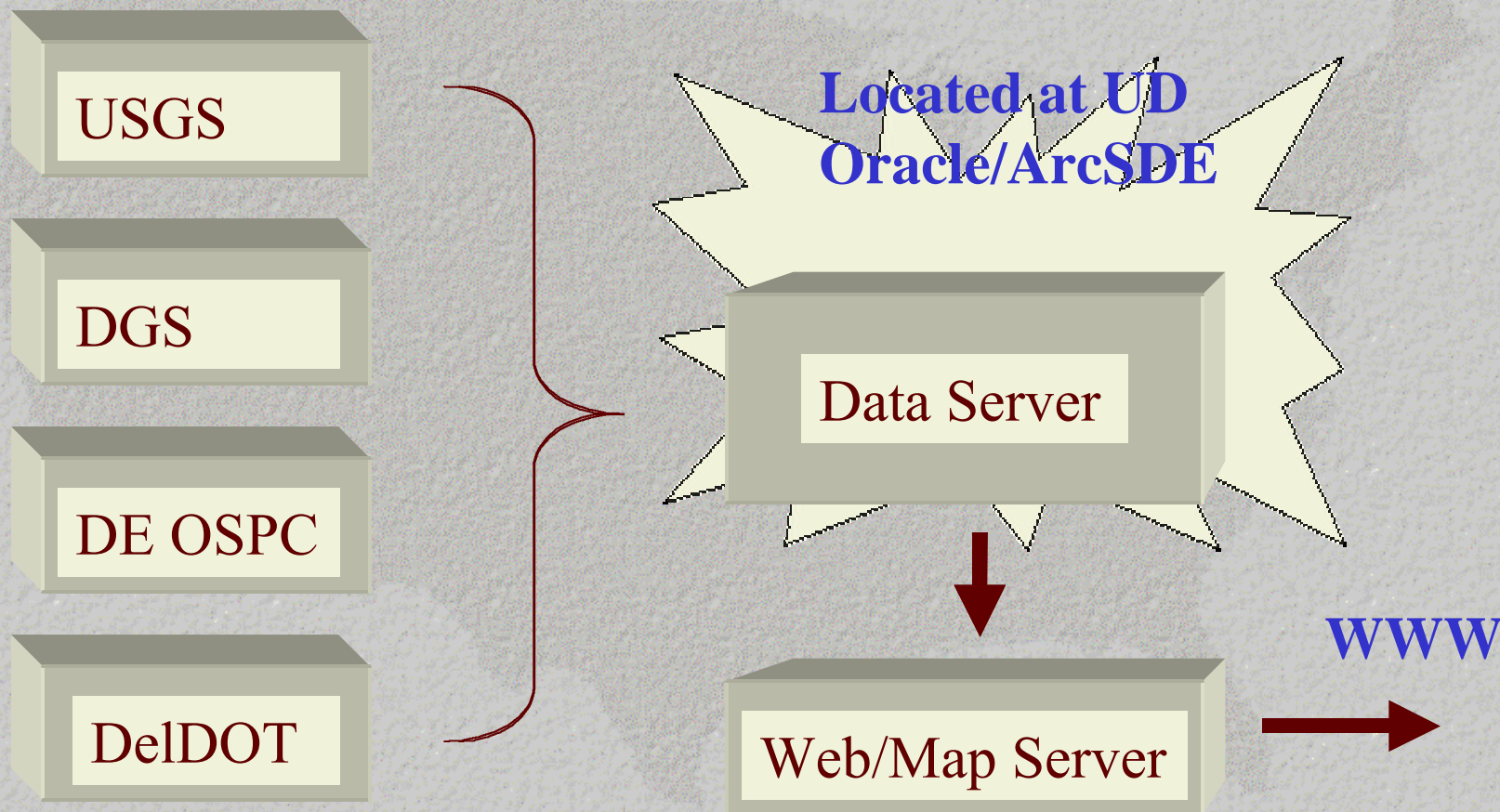


Help Pages

Standards
Collaboration
Integration

Infrastructure,
Database

DataMIL – Data Sources

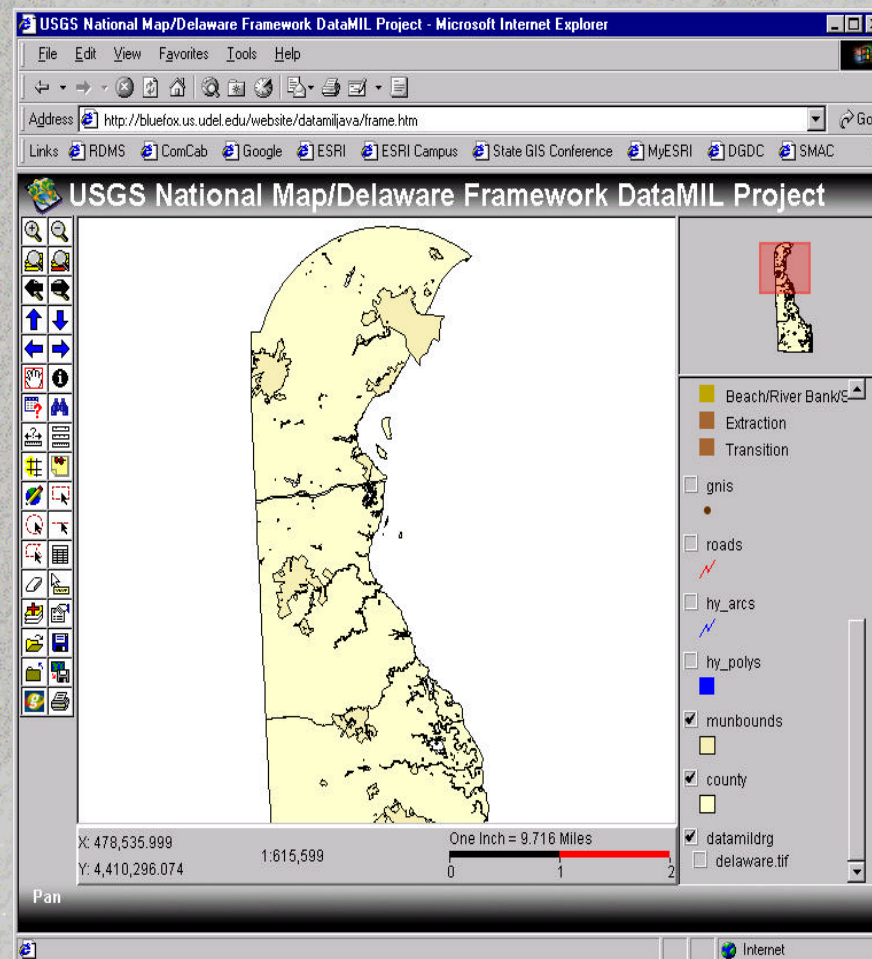


DataMIL - Website

- Data Integration Lab
 - Interactive Mapping (Java Viewer)
 - Feature Editing, Commenting
- Map Production Lab
 - Interactive Mapping (HTML Viewer)
 - GIS Data Downloads (Images and Shapefiles)
 - Maps On Demand concept
- Discussion Forum
- Online Help Pages

Data Integration Lab

- User can suggest shape or attribute edits
- User can modify rendering of features
- MapNotes, EditNotes (Java Viewer)
- Feature-based commenting
- Edits sent to data source



Map Production Lab

- DE Framework layers
- USGS DLGs
- Mapservice “layer sets”
- GIS data download
- Online Maps
- Production Maps
- Metadata

Map Lab

Combining Data

- State data
- DLGs
- DOQQs
- DRGs
- GNIS
- DEMs

Map Lab

Production Map Generation:

- “Mini-Topo”
- High cartographic quality
- Printable (PDF)
- User-defined page size
- USGS symbology & layout
- Layer-set based

Discussion Forum

- Threaded discussion list
 - Content/Keyword searchable
 - Spatially searchable
- Online archive
 - Browse all messages
- Submission through Data Integration and Map Production Labs and direct email

Distributed Database

- Individual layers at data provider's location (Federal and State)
 - Reduces duplication of efforts
 - Increases role of data provider
 - Community building
- Reliability and accessibility
- One central application host for website deployment

Data Integration/Maintenance

- Complete metadata development
- Partnership development among federal, state, and local agencies (data providers)
- Agreement upon certain standards and procedures
- Implementation of distributed database
- Long-term maintenance strategy (data and metadata)

Key Organizations

- State of Delaware
 - Coordination of multiple agencies through Delaware's I-Team
- USGS Headquarters (National Map Team)
- USGS Mid-Continent Mapping Center
- USGS Eros Data Center
- ESRI

DataMIL Status

- Memorandum of Agreement between USGS and State of Delaware
- Kick-off meeting August 13 – 15, 2001 in Reston, VA (USGS Headquarters)
- Selected as an National Map Pilot Project
- Task on the ESRI/USGS CRADA
- Foundation for Delaware's I-Team

DataMIL Project Timeline

Infrastructure and Planning

HW/SW

Data Preparation

Website Design and Development

Collaborative Tool Development

Planning for Distributed Database

Implementation of Distributed Database

Integration/Maintenance Procedures



We are here.

Public Relations

- DGDC
- Newsletters, Journals, Websites
- Conferences
 - Delaware GIS 2002, Towson, ESRI UC
- National exposure from USGS and ESRI

What's Next for Delaware?

- Coordination of I-Team
- Solidify Framework (Version 2.0)
- Non-Framework spatial datasets
- Identify state, county and local agencies to be distributed database nodes
- Investigate infrastructure and implementation procedures for distributed database



K-12 Community Atlas Project: Focus on "Livable Delaware"

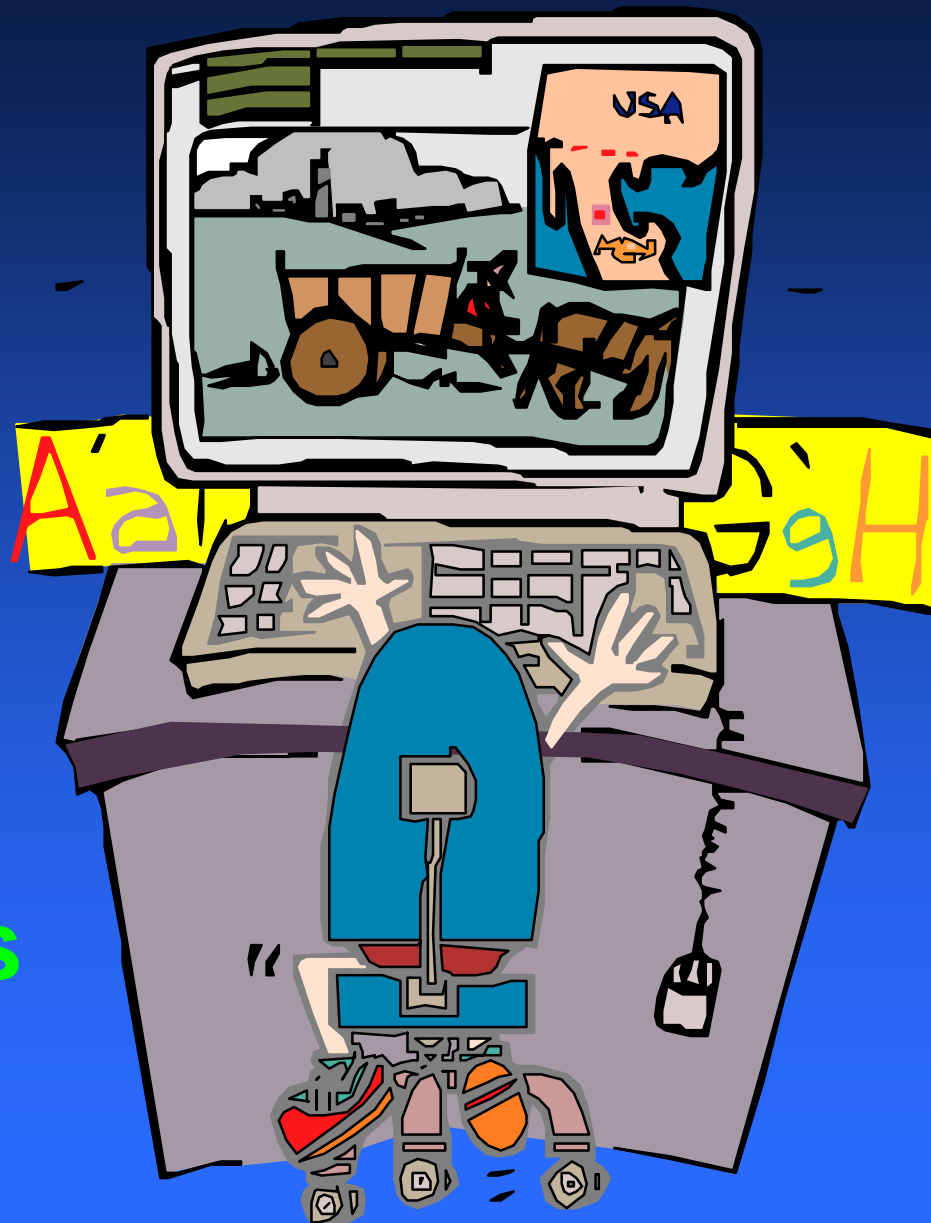


August, 29, 2001

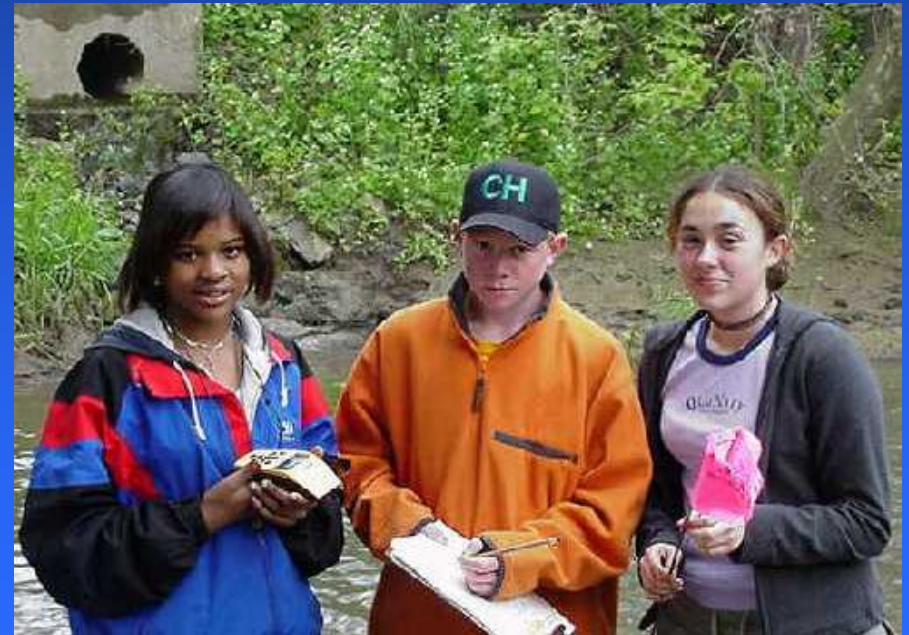
ESRI's K-12 Vision

Preschoolers
Access the
World

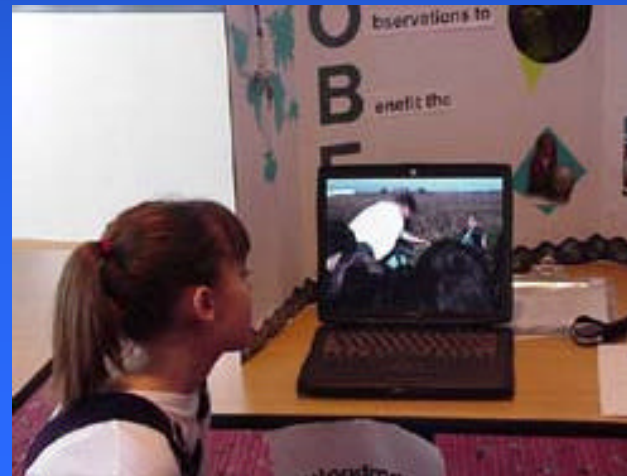
with computers
and the
internet...



And re-envision their own backyard...



Using GIS as a tool for exploration and analysis.

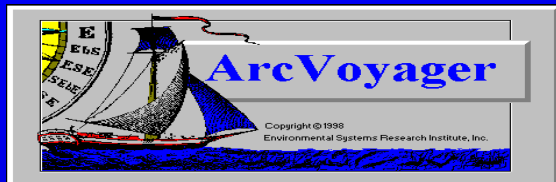


ESRI 's K-12 Commitment

- 🏢 ESRI Schools & Libraries Team
- 🏢 Customized software packages
- 🏢 Tutorials/Training
- 🏢 Lesson plans!
- 🏢 Free data
- 🏢 **Projects/Hands-On Opportunities**
- 🏢 Continually evolving...



Customized Software Packages



- Free!
- Windows/Mac
- No licensing restrictions!
- Specially-designed K-12 interfaces and data sets
- Includes data, lesson plans, tutorials



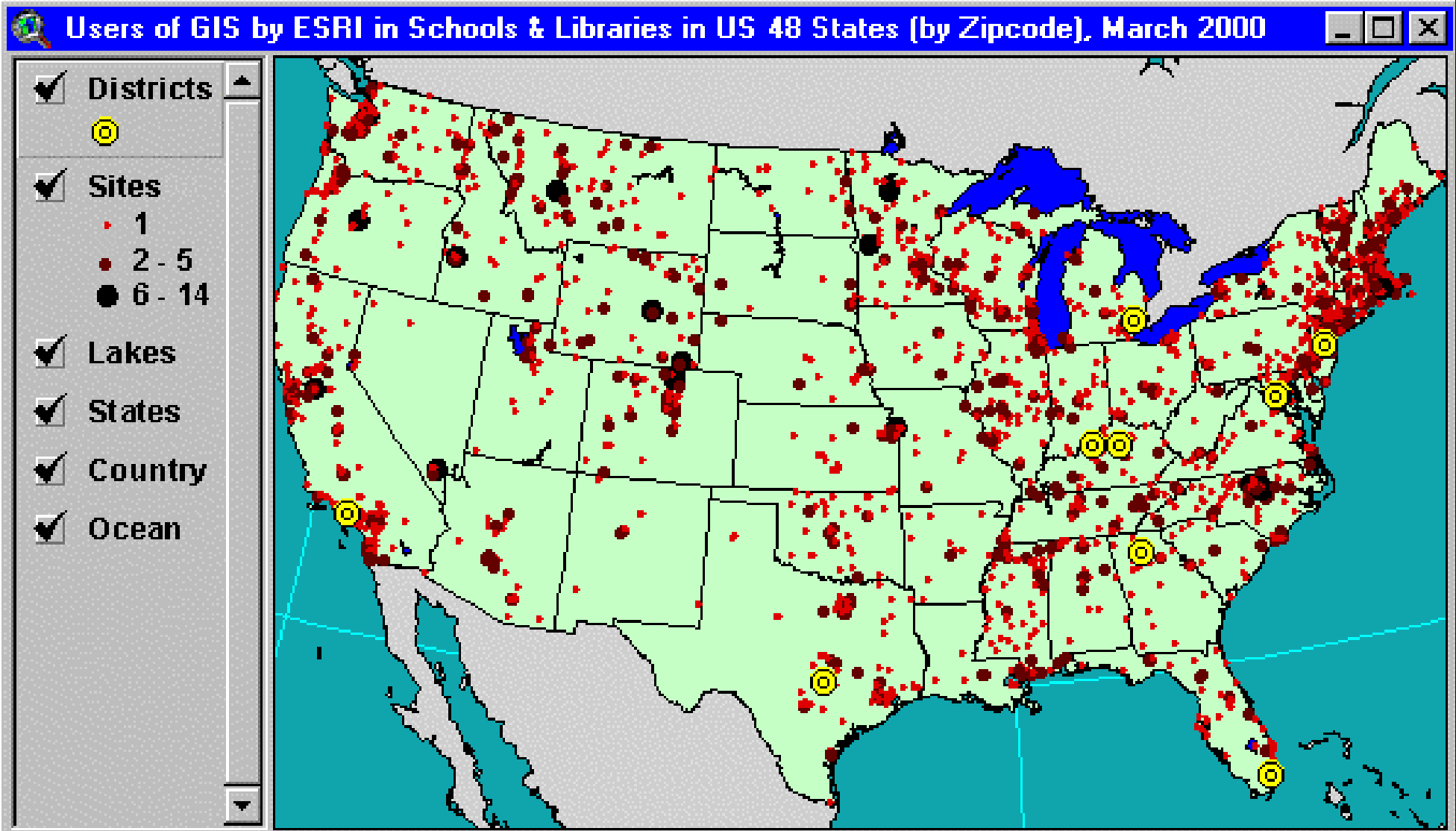
- Free!
- Windows/Mac
- Site-Wide License
- Specially-designed K-12 interfaces and data sets
- Includes data, lesson plans, tutorials



- Free!
- Windows/Mac
- No licensing restrictions!



K-12 Users of ESRI GIS



Free Lesson Plans!

 ArcLessons Online:
<http://www.esri.com/arclessons>

 ESRI K-12 Lessons

 *Explore Your World, GIS for Everyone, etc.*

 New GIS lesson plan textbooks due out in 2002



Training for K-12 Teachers

 ESRI K-12 Authorized Training Program

 3rd party training courses & institutes

- ‘Geography with Technology’ Summer Workshop
- ESRI software & materials

 ESRI Virtual Campus: <http://campus.esri.com/>

- Free training available!
- K-12 modules coming soon!

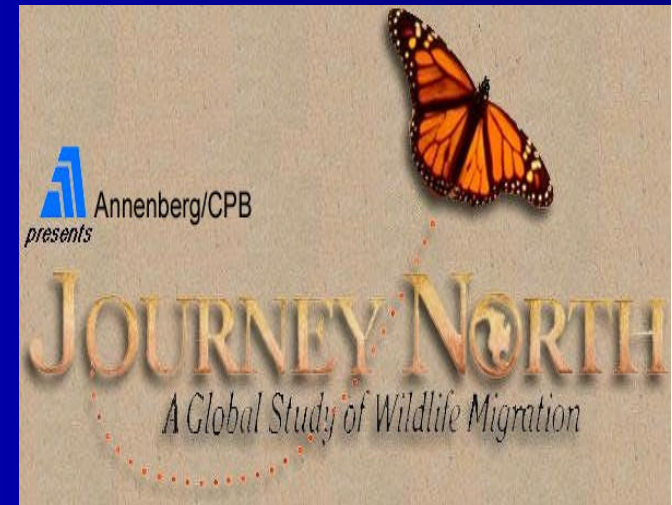


JASON IX

Oceans of Earth
And Beyond

www.jason.org

GREEN



Projects & Hands-On Opportunities

*National
Geographic Kids
Network*



ESRI Community Atlas Project: The Goal

 encourage K-12 students and teachers to...

- think “spatially” about their communities
- ask, investigate and analyze geographic questions about their community
- use maps and text to describe their community
- share the results through the Web!



ESRI Community Atlas Project: The Basics



Working together, students produce a community profile in 10-20 static maps with descriptive text.



This requires significant research and exploration.

- what are the bounds of "the community"?
- what is it like?
- what is the best way to represent the community?



Completed projects are uploaded to ESRI website to be searched, browsed and compared!



School receives free ArcView site license



ESRI Community Atlas Project: Map Resources

 create your own maps from scratch
using free GIS software and data



- Geography Network
- ArcVoyager data
- ArcData Online
- Spatial Data Clearinghouses



ESRI Community Atlas Project: Map Resources

- 🏠 grab 'canned' maps and/or images from the internet
- 🏠 use internet mapping applications to create custom maps
- 🏠 for example... DNREC's "Environmental Navigator"



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HOMEPAGE GETTING STARTED BUYING SELLING OFFER/CLOSING MOVING OWNING

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Today's Rates
 30 Fix 15 Fix 1 Var
 7.46% 7.12% 6.01%

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[Real Estate News](#)

Map
 Zoom Out Zoom In
 (c) 1998 ESRI, GDT Approx. 0.9 miles across

Property Details:
 \$400,000
 10 bedrooms / 2 baths
 3136 square feet
 City: SAN DIEGO
 State: California
 Zip Code: 92101

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Delaware DOL

Home

Locate Address
 Find Intersection
 Closest Service
 Find a Service
 Map Legend
 Print Map

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Did you Find a Wrong Address ?

Search location - Microsoft Internet Explorer

Address: <http://real.esri.com/cv/html/main.htm>

SPACE IMAGING
Welcome To The CARTERRA™ Archive*

Step-by-Step Instructions
FAQ

Footprints:
☒ Thematic Mapper (17)
☒ IRS Pan (13)
☒ IRS LSS (14)
☒ IRS LSS II (10)
☒ IRS LSS II (21)
☒ Other (8)

Date Range:
 1/1/1998
 7/23/1998

Locate By:
☒ Use Map
☐ Address
☐ Coordinate
☐ Place Name
☐ Telephone
☐ Advanced

New Search: [Start over](#)

Map
 Zoom Out Zoom In
 (c) 1998 ESRI, GDT, Space Imaging Approx. 346.4 miles across

Tool: Review Selected Footprints Footprints selected: 2 of 51

Map Machine @ nationalgeographic.com - Microsoft Internet Explorer

Address: <http://plasma.nationalgeographic.com/mapmachine/>

NATIONALGEOGRAPHIC.COM
MapMachine
 wisdom...knowledge...awareness

THEME: EARTHQUAKES (RECENT) [SELECT A NEW THEME](#)

Find a Place
 [GO](#)

Map Options:
 SIZE: Small Large
 Related Atlas Maps
 Printable Version


Map Machine
 DRAG IN MAP TO ZOOM OR CLICK TO RECENTER
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Address <http://www.geographynetwork.com/> Go Links



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DATA

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SOLUTIONS

COMMUNITY

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Free Resources

Be a Publisher

The Geography Network is a global community of government and commercial data providers who are committed to making geographic content easily accessible.

Featured Content

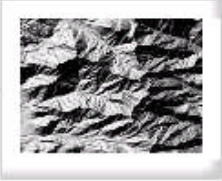
- Map: [DMTI CanMap Streets](#)
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- [VMap World Basemap](#)
- [WSI Satellite Imagery](#)
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explorer

QUICK SEARCH

Area of Interest

World

Keyword (e.g. river)

SEARCH

The Latest News

- [Free Course Available on ESRI Virtual Campus](#)
- [Bureau of Land Management Launches GeoCommunicator](#)
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javascript:pop('/explorer/geonet_explorer.cfm?origin=gn_main');

Start Exploring - C:\... DE GIS Day Ini... Geography ... K-12_dgdc pre... Internet 5:52 PM

Delaware GIS Day Challenge

- 🏭 regional version of Community Atlas
- 🏭 special website with Delaware mapping application!
- 🏭 'map app' created by ESRI ; website sponsored and maintained by DNREC:
www.dnrec.state.de.us/gis2000



Delaware GIS Day Challenge

- 🏭 theme for 2000 - Conservation
- 🏭 theme for 2001 - Smart Growth?



- 🏭 new site goes live GIS Day 2001
(November 14, 2001)
- 🏭 new data?

Can Delaware produce the next Community Atlas Model Project?

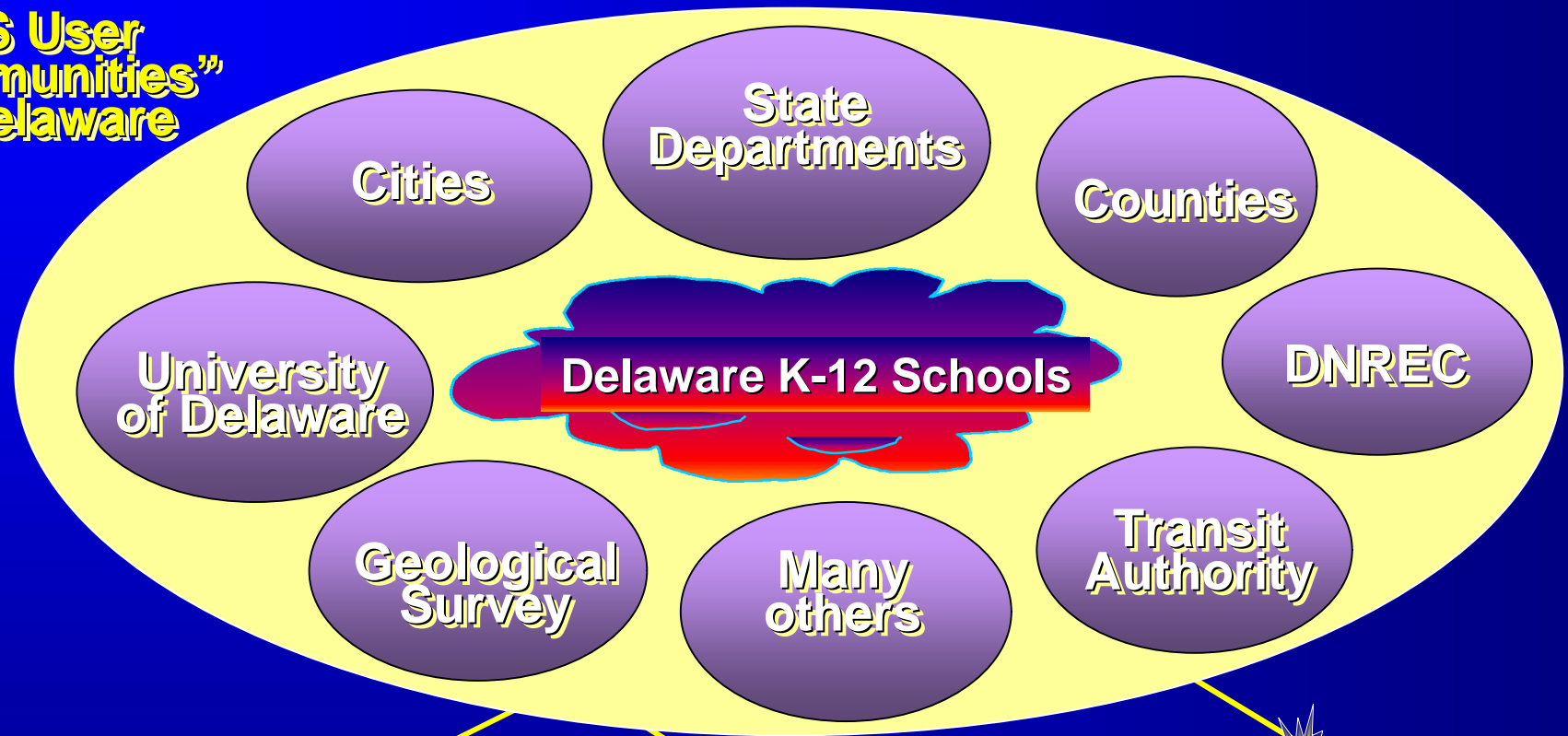
2001 Award Winner:

Smart Growth in Action
Washington County, Minnesota
created by Stillwater area High school
human geography independent study
students



Linking K-12 Schools with Data, Mapping Tools, Software and GIS Professionals

**GIS User
"Communities"
in Delaware**



Geography Network

**Other Internet
Resources**

**Delaware GIS Day
Mapping Application**

GIS DAY

Challenge for Delaware:

help 12 Delaware schools complete a
Community Atlas project

(get Delaware in the Atlas
and software into the schools!)



ESRI Schools & Libraries Team

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www.esri.com/k-12

ESRI -Philadelphia

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